

What is Claimed:

1. A method of treating mammalian cancer cells deficient in functional p53, said method comprising contacting cells from said cancer cells with a p53 tumor suppressor protein or with a recombinant adenoviral vector comprising a nucleic acid encoding p53 and also contacting said cells with the polyprenyl-protein transferase inhibitor FPT39, such that one or more disease characteristic of the cell is ameliorated, wherein the mammalian cancer cells are human breast, colorectal, pancreatic, or prostate cancer cells.
2. The method of claim 1, wherein said nucleic acid is delivered by a recombinant adenoviral vector comprising a partial or total deletion of a protein IX DNA and comprising a nucleic acid encoding a wild-type p53 protein.
3. The method of claim 1, wherein said recombinant adenoviral vector comprises the adenovirus type 2 major late promoter or the human CMV promoter, the adenovirus type 2 tripartite leader cDNA and a human p53 cDNA.
4. The method of claim 1, wherein said cells are first contacted with said p53 tumor suppressor protein or with a recombinant adenoviral vector comprising a nucleic acid encoding p53 and are subsequently contacted with said FPT39.
5. The method of claim 1, wherein said cells are first contacted with said FPT39 and subsequently contacted with said p53 tumor suppressor protein or with a recombinant adenoviral vector comprising a nucleic acid encoding p53.
6. The method of claim 1, wherein said cells are simultaneously contacted with said FPT39 and with said p53 tumor suppressor protein or with a recombinant adenoviral vector comprising a nucleic acid encoding p53.
7. The method of claim 1, wherein said p53 tumor suppressor protein or said recombinant adenoviral vector comprising a nucleic acid encoding p53 is dispersed in a pharmacologically acceptable excipient.
8. The method of claim 1, wherein said p53 tumor suppressor protein or said recombinant adenoviral vector comprising a nucleic acid encoding p53 and said FPT39 are dispersed in a single composition.
9. The method of claim 1, wherein said contacting cells with a p53 tumor suppressor protein or said recombinant adenoviral vector comprising a nucleic acid encoding p53 comprises contacting said cells with said p53 tumor suppressor protein or said recombinant adenoviral vector comprising a nucleic acid encoding p53 in a multiplicity of treatments each separated by at least about 6 hours.

10. A method of treating human breast, colorectal, pancreatic, or prostate cancer cells in a mammal, the method comprising administering to the mammal a p53 tumor suppressor protein or an adenoviral vector comprising a nucleic acid sequence encoding a p53 tumor suppressor protein and also administering to the mammal the polyprenyl-protein transferase inhibitor FPT39, such that one or more disease characteristics of the cancer cells is ameliorated.

11. A method of treating human breast, colorectal, pancreatic, or prostate cancer cells *in vitro*, the method comprising contacting cells from the cancer cells with a 53 tumor suppressor protein or an adenoviral vector comprising a nucleic acid sequence encoding a p53 tumor suppressor protein and also contacting the cells with the polyprenyl-protein transferase inhibitor FPT39, such that one or more disease characteristics of the cancer cells is ameliorated.